



[Subscribe](#) (Full Service) [Register](#) (Limited Service, Free) [Login](#)

Search: ☒ The ACM Digital Library ☐ The Guide

JUnit and multiple virtual machines +"plural virtual machine" +



Nothing Found

Your search for **JUnit and multiple virtual machines +"plural virtual machine" +"unit testing"** did not return any results.

You may want to try an [Advanced Search](#) for additional options.

Please review the [Quick Tips](#) below or for more information see the [Search Tips](#).

Quick Tips

- Enter your search terms in lower case with a space between the terms.

sales offices

You can also enter a full question or concept in plain language.

Where are the sales offices?

- Capitalize proper nouns to search for specific people, places, or products.

John Colter, Netscape Navigator

- Enclose a phrase in double quotes to search for that exact phrase.

"museum of natural history" "museum of modern art"

- Narrow your searches by using a + if a search term must appear on a page.

museum +art

- Exclude pages by using a - if a search term must not appear on a page.

museum -Paris

Combine these techniques to create a specific search query. The better your description of the information you want, the more relevant your results will be.

museum +"natural history" dinosaur -Chicago

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2007 ACM, Inc.

[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)

[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)Search: ☒ The ACM Digital Library ☐ The Guide
+"plural virtual machines" +"unit testing"

Nothing Found

Your search for **+"plural virtual machines" +"unit testing"** did not return any results.

You may want to try an [Advanced Search](#) for additional options.

Please review the [Quick Tips](#) below or for more information see the [Search Tips](#).

Quick Tips

- Enter your search terms in lower case with a space between the terms.

sales offices

You can also enter a full question or concept in plain language.

Where are the sales offices?

- Capitalize proper nouns to search for specific people, places, or products.

John Colter, Netscape Navigator

- Enclose a phrase in double quotes to search for that exact phrase.

"museum of natural history" "museum of modern art"

- Narrow your searches by using a **+** if a search term must appear on a page.

museum +art

- Exclude pages by using a **-** if a search term must not appear on a page.

museum -Paris

Combine these techniques to create a specific search query. The better your description of the information you want, the more relevant your results will be.

museum +"natural history" dinosaur -Chicago

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2007 ACM, Inc.
[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)

[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)Search: ☒ The ACM Digital Library ☐ The Guide
+"plural virtual machines" +"JUnit"

Nothing Found

Your search for +"plural virtual machines" +"JUnit" did not return any results.

You may want to try an [Advanced Search](#) for additional options.

Please review the [Quick Tips](#) below or for more information see the [Search Tips](#).

Quick Tips

- Enter your search terms in lower case with a space between the terms.

sales offices

You can also enter a full question or concept in plain language.

Where are the sales offices?

- Capitalize proper nouns to search for specific people, places, or products.

John Colter, Netscape Navigator

- Enclose a phrase in double quotes to search for that exact phrase.

"museum of natural history" "museum of modern art"

- Narrow your searches by using a + if a search term must appear on a page.

museum +art

- Exclude pages by using a - if a search term must not appear on a page.

museum -Paris

Combine these techniques to create a specific search query. The better your description of the information you want, the more relevant your results will be.

museum +"natural history" dinosaur -Chicago

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2007 ACM, Inc.
[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)

[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)Search: ☒ The ACM Digital Library ☐ The Guide
+"multiple virtual machines" +"JUnit"

Nothing Found

Your search for **+"multiple virtual machines" +"JUnit"** did not return any results.

You may want to try an [Advanced Search](#) for additional options.

Please review the [Quick Tips](#) below or for more information see the [Search Tips](#).

Quick Tips

- Enter your search terms in lower case with a space between the terms.

sales offices

You can also enter a full question or concept in plain language.

Where are the sales offices?

- Capitalize proper nouns to search for specific people, places, or products.

John Colter, Netscape Navigator

- Enclose a phrase in double quotes to search for that exact phrase.

"museum of natural history" "museum of modern art"

- Narrow your searches by using a **+** if a search term must appear on a page.

museum +art

- Exclude pages by using a **-** if a search term must not appear on a page.

museum -Paris

Combine these techniques to create a specific search query. The better your description of the information you want, the more relevant your results will be.

museum +"natural history" dinosaur -Chicago

Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)



[Subscribe](#) (Full Service) [Register](#) (Limited Service, Free) [Login](#)

Search: ☒ The ACM Digital Library ☐ The Guide
+"multiple virtual machines" +"unit testing"



Nothing Found

Your search for **+"multiple virtual machines" +"unit testing"** did not return any results.

You may want to try an [Advanced Search](#) for additional options.

Please review the [Quick Tips](#) below or for more information see the [Search Tips](#).

Quick Tips

- Enter your search terms in lower case with a space between the terms.

sales offices

You can also enter a full question or concept in plain language.

Where are the sales offices?

- Capitalize proper nouns to search for specific people, places, or products.

John Colter, Netscape Navigator

- Enclose a phrase in double quotes to search for that exact phrase.

"museum of natural history" "museum of modern art"

- Narrow your searches by using a **+** if a search term must appear on a page.

museum +art

- Exclude pages by using a **-** if a search term must not appear on a page.

museum -Paris

Combine these techniques to create a specific search query. The better your description of the information you want, the more relevant your results will be.

museum +"natural history" dinosaur -Chicago

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2007 ACM, Inc.

[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)



USPTO

[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)

 Search: ☒ The ACM Digital Library ☐ The Guide

JUnit and multiple virtual machines


[Feedback](#) [Report a problem](#) [Satisfaction survey](#)
Terms used: JUnit and multiple virtual machines

Found 61,262 of 215,737

Sort results by

relevance

[Save results to a Binder](#)Try an [Advanced Search](#)Try this search in [The ACM Guide](#)

Display results

expanded form

[Search Tips](#)
☐ Open results in a new window

Results 1 - 20 of 200

Result page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [next](#)

Best 200 shown

Relevance scale ☐ ☐ ☐ ☐ ☐

1 [Interface-based programming assignments and automatic grading of java programs](#)



Michael T. Helmick

 June 2007 **ACM SIGCSE Bulletin , Proceedings of the 12th annual SIGCSE conference on Innovation and technology in computer science education ITiCSE '07,**
 Volume 39 Issue 3

Publisher: ACM Press

Full text available: [pdf\(189.91 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

AutoGrader is a framework developed at Miami University for the automatic grading of student programming assignments written in the Java programming language. *AutoGrader* leverages the abstract concept of interfaces, as implemented by the Java **interface** language construct, in both the assignment and grading of programming assignments. The use of interfaces reinforces the role of procedural abstraction in object-oriented programming and allows for a common API to all studen ...

Keywords: automated grading, interfaces, java

2 [Grid and races: Multi-environment software testing on the grid](#)



Alexandre Duarte, Gustavo Wagner, Francisco Brasileiro, Walfredo Cirne

 July 2006 **Proceeding of the 2006 workshop on Parallel and distributed systems: testing and debugging PADTAD '06**

Publisher: ACM Press

Full text available: [pdf\(538.49 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

We propose a solution to improve the confidence on the correctness of applications designed to be executed in heterogeneous environments, like a grid. Our solution is motivated by the observation that the traditional ways to qualify test processes are based on code coverage metrics. We believe that this approach is not adequate when dealing with applications that can (and do) fail when interacting with heterogeneous execution environments. Besides code coverage, tests must also cover possible en ...

Keywords: JUnit, computational grid, distributed testing, unit testing

3 [Posters: Unit testing concurrent software](#)

William Pugh, Nathaniel Ayewah

 November 2007 **Proceedings of the twenty-second IEEE/ACM international conference on Automated software engineering ASE '07**

Publisher: ACM

Full text available:  [pdf\(228.56 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

There are many difficulties associated with developing correct multithreaded software, and many of the activities that are simple for single threaded software are exceptionally hard for multithreaded software. One such example is constructing unit tests involving multiple threads. Given, for example, a blocking queue implementation, writing a test case to show that it blocks and unblocks appropriately using existing testing frameworks is exceptionally hard. In this paper, we describe the Mult ...

Keywords: JUnit test cases, concurrent abstraction, java, multithreadedTC, testing framework


4 A history of Haskell: being lazy with class



Paul Hudak, John Hughes, Simon Peyton Jones, Philip Wadler

June 2007 **Proceedings of the third ACM SIGPLAN conference on History of programming languages HOPL III**

Publisher: ACM Press

Full text available:  [pdf\(1.15 MB\)](#) Additional Information: [full citation](#), [appendices and supplements](#), [abstract](#), [references](#), [index terms](#)

This paper describes the history of Haskell, including its genesis and principles, technical contributions, implementations and tools, and applications and impact.

5 Security and eliability: A feather-weight virtual machine for windows applications



Yang Yu, Fanglu Guo, Susanta Nanda, Lap-chung Lam, Tzi-cker Chiueh

June 2006 **Proceedings of the second international conference on Virtual execution environments VEE '06**

Publisher: ACM Press

Full text available:  [pdf\(192.18 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Many fault-tolerant and intrusion-tolerant systems require the ability to execute unsafe programs in a realistic environment without leaving permanent damages. Virtual machine technology meets this requirement perfectly because it provides an execution environment that is both realistic and isolated. In this paper, we introduce an OS level virtual machine architecture for Windows applications called *Feather-weight Virtual Machine (FVM)*, under which virtual machines share as many resources ...

Keywords: copy on write, mobile code security, namespace virtualization, system call interception, virtual machine

6 Technical papers: testing II: A framework for component deployment testing

Antonia Bertolino, Andrea Polini

May 2003 **Proceedings of the 25th International Conference on Software Engineering ICSE '03**

Publisher: IEEE Computer Society

Full text available:  [pdf\(1.34 MB\)](#)  Additional Information: [full citation](#), [abstract](#), [references](#), [citings](#), [index terms](#)
[Publisher Site](#)

Component-based development is the emerging paradigm in software production, though several challenges still slow down its full taking up. In particular, the "component trust problem" refers to how adequate guarantees and documentation about a component's behaviour can be transferred from the component developer to its potential users. The

capability to test a component when deployed within the target application environment can help establish the compliance of a candidate component to the cust ...

7 Improving virtual machine performance using a cross-run profile repository



Matthew Arnold, Adam Welc, V. T. Rajan

October 2005 **ACM SIGPLAN Notices , Proceedings of the 20th annual ACM SIGPLAN conference on Object oriented programming, systems, languages, and applications OOPSLA '05**, Volume 40 Issue 10

Publisher: ACM Press

Full text available: pdf(302.47 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Virtual machines for languages such as the Java programming language make extensive use of online profiling and dynamic optimization to improve program performance. But despite the important role that profiling plays in achieving high performance, current virtual machines discard a program's profile data at the end of execution, wasting the opportunity to use past knowledge to improve future performance. In this paper, we present a fully automated architecture for exploiting cross-run profile da ...

Keywords: Java, profiling, selective optimization, virtual machine

8 Tracking bad apples: reporting the origin of null and undefined value errors

Michael D. Bond, Nicholas Nethercote, Stephen W. Kent, Samuel Z. Guyer, Kathryn S. McKinley

October 2007 **ACM SIGPLAN Notices , Proceedings of the 22nd annual ACM SIGPLAN conference on Object oriented programming systems and applications OOPSLA '07**, Volume 42 Issue 10

Publisher: ACM

Full text available: pdf(265.82 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Programs sometimes crash due to unusable values, for example, when Java and C# programs dereference null pointers and when C and C++ programs use undefined values to affect program behavior. A stack trace produced on such a crash identifies the effect of the unusable value, not its cause, and is often not much help to the programmer.

This paper presents efficient *origin tracking* of unusable values; it shows how to record where these values come into existence, correctly propagat ...

Keywords: debugging, java, low-overhead run-time support, managed languages, null pointer exceptions, undefined values, valgrind

9 DAViM: a dynamically adaptable virtual machine for sensor networks



Sam Michiels, Wouter Horré, Wouter Joosen, Pierre Verbaeten

November 2006 **Proceedings of the international workshop on Middleware for sensor networks MidSens '06**

Publisher: ACM Press

Full text available: pdf(342.88 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Sensor networks are being deployed for substantial periods of activity, and are being used by multiple applications with possibly diverse requirements. Since manually upgrading or updating sensor software is often impossible, run-time software reconfiguration represents a considerable success factor for many practical usage scenarios of sensor networks. This paper presents DAViM, the DistriNet Adaptable Virtual Machine and describes how it allows to customize sensor behavior, to extend its funct ...

Keywords: adaptability, sensor middleware, software architecture

10 Scalability, performance, and real-time: Diagnosing performance overheads in the xen virtual machine environment



Aravind Menon, Jose Renato Santos, Yoshio Turner, G. (John) Janakiraman, Willy Zwaenepoel

June 2005 **Proceedings of the 1st ACM/USENIX international conference on Virtual execution environments VEE '05**

Publisher: ACM Press

Full text available: pdf(274.74 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Virtual Machine (VM) environments (e.g., VMware and Xen) are experiencing a resurgence of interest for diverse uses including server consolidation and shared hosting. An application's performance in a virtual machine environment can differ markedly from its performance in a non-virtualized environment because of interactions with the underlying virtual machine monitor and other virtual machines. However, few tools are currently available to help debug performance problems in virtual machine envi ...

Keywords: performance analysis, statistical profiling, virtual machine monitors

11 Virtual Machine Hosting for Networked Clusters: Building the Foundations for "Autonomic" Orchestration

Laura Grit, David Irwin, Aydan Yumerefendi, Jeff Chase

November 2006 **Proceedings of the 2nd International Workshop on Virtualization Technology in Distributed Computing VTDC '06**

Publisher: IEEE Computer Society

Full text available: pdf(196.68 KB) Additional Information: [full citation](#), [abstract](#)
[Publisher Site](#)

Virtualization technology offers powerful resource management mechanisms, including performance-isolating resource schedulers, live migration, and suspend/resume. But how should networked virtual computing systems use these mechanisms? A grand challenge is to devise practical policies to drive these mechanisms in a self-managing or autonomic system, without relying on human operators. This paper explores architectural and algorithmic issues for resource management policy and orchestration in ...

12 Experiences with a Grid Gateway Architecture Using Virtual Machines

David Bannon, Rajesh Chhabra, Paul Coddington, Daniel Cox, Frank Crawford, Rhys Francis, Gerson Galang, Graham Jenkins, Marco La Rosa, Steve McMahon, Terry Rankine, Robert Woodcock, Ashley Wright



November 2006 **Proceedings of the 2nd International Workshop on Virtualization Technology in Distributed Computing VTDC '06**


Publisher: IEEE Computer Society



Full text available: pdf(161.88 KB) Additional Information: [full citation](#), [abstract](#)
[Publisher Site](#)

The Australian Partnership for Advanced Computing (APAC) began developing the APAC National Grid in 2004. The APAC Grid integrates several partner sites, most of which have multiple compute resources. Different APAC grid application projects require different grid middleware systems, including GT2, GT4 and LCG. In order to provide these different systems to interface to different resources at each site, it was decided to provide a single, standard grid gateway machine at each site, and to use Xe ...

13 Frontmatter (TOC, Miscellaneous material)



-  ACM SIGSOFT Software Engineering Notes staff
November 2006 **ACM SIGSOFT Software Engineering Notes**, Volume 31 Issue 6
Publisher: ACM Press
Full text available:  [pdf\(1.25 MB\)](#) Additional Information: [full citation](#)

- 14 VM/4: ACOS-4 virtual machine architecture
S. Nanba, N. Ohno, H. Kubo, H. Morisue, T. Ohshima, H. Yamagishi
June 1985 **ACM SIGARCH Computer Architecture News , Proceedings of the 12th annual international symposium on Computer architecture ISCA '85**, Volume 13 Issue 3
Publisher: IEEE Computer Society Press, ACM
Full text available:  [pdf\(767.68 KB\)](#) Additional Information: [full citation](#), [index terms](#)



- 15 Remote pointcut: a language construct for distributed AOP
 Muga Nishizawa, Shigeru Chiba, Michiaki Tatsubori
March 2004 **Proceedings of the 3rd international conference on Aspect-oriented software development AOSD '04**
Publisher: ACM Press
Full text available:  [pdf\(1.41 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#)

This paper presents our extension to AspectJ for distributed computing. Although AspectJ allows Java developers to modularize a crosscutting concern as an aspect, this paper shows that some crosscutting concerns in distributed computing are not modularized in AspectJ as simple aspects. Rather, aspects modularizing such a concern tend to be in code spread over multiple hosts and explicitly communicated across the network. This paper illustrates this fact with an example of testing a distributed p ...

Keywords: AspectJ, distributed software, language design

- 16 A codesign virtual machine for hierarchical, balanced hardware/software system modeling
 JoAnn M. Paul, Simon N. Peffers, Donald E. Thomas
June 2000 **Proceedings of the 37th conference on Design automation DAC '00**
Publisher: ACM Press
Full text available:  [pdf\(164.21 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

The Codesign Virtual Machine (CVM) is introduced as a next generation system modeling semantic. The CVM permits unrestricted system-wide software and hardware behaviors to be designed to a single scheduling semantic by resolving time-based (resource) and time-independent (state-interleaved) models of computation. CVM hierarchical relationships of bus and clock state domains provide a means of exploring hardware/software scheduling trade-offs to a consistent semantic model using top-down, bo ...

- 17 Terra: a virtual machine-based platform for trusted computing
 Tal Garfinkel, Ben Pfaff, Jim Chow, Mendel Rosenblum, Dan Boneh
October 2003 **ACM SIGOPS Operating Systems Review , Proceedings of the nineteenth ACM symposium on Operating systems principles SOSP '03**, Volume 37 Issue 5
Publisher: ACM Press
Full text available:  [pdf\(140.31 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

We present a flexible architecture for trusted computing, called Terra, that allows applications with a wide range of security requirements to run simultaneously on commodity hardware. Applications on Terra enjoy the semantics of running on a separate, dedicated, tamper-resistant hardware platform, while retaining the ability to run side-by-side with normal applications on a general-purpose computing platform. Terra achieves this synthesis by use of a *trusted virtual machine monitor* (TVMM) ...

Keywords: VMM, attestation, authentication, trusted computing, virtual machine, virtual machine monitor

18 Devirtualizable virtual machines enabling general, single-node, online maintenance



David E. Lowell, Yasushi Saito, Eileen J. Samberg

October 2004 **ACM SIGARCH Computer Architecture News , ACM SIGOPS Operating Systems Review , ACM SIGPLAN Notices , Proceedings of the 11th international conference on Architectural support for programming languages and operating systems ASPLOS-XI**, Volume 32 , 38 , 39 Issue 5 , 5 , 11

Publisher: ACM Press

Full text available: pdf(174.01 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Maintenance is the dominant source of downtime at high availability sites. Unfortunately, the dominant mechanism for reducing this downtime, cluster rolling upgrade, has two shortcomings that have prevented its broad acceptance. First, cluster-style maintenance over many nodes is typically performed a few nodes at a time, making maintenance slow and often impractical. Second, cluster-style maintenance does not work on single-node systems, despite the fact that their unavailability during maintenance ...

Keywords: availability, online maintenance, planned downtime, virtual machines

19 Garbage collection on multiprocessors: Task-aware garbage collection in a multi-tasking virtual machine

Sunil Soman, Laurent Daynès, Chandra Krintz

June 2006 **Proceedings of the 5th international symposium on Memory management ISMM '06**

Publisher: ACM

Full text available: pdf(125.22 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

A multi-tasking virtual machine (MVM) executes multiple programs in isolation, within a single operating system process. The goal of a MVM is to improve startup time, overall system throughput, and performance, by effective reuse and sharing of system resources across programs (tasks). However, multitasking also mandates a memory management system capable of offering a guarantee of isolation with respect to garbage collection costs, accounting of memory usage, and timely reclamation of heap resources ...

Keywords: java, multi-tasking, resource reclamation, task-aware garbage collection, virtual machine

20 Maintenance and evolution: UMLDiff: an algorithm for object-oriented design differencing



Zhenchang Xing, Eleni Stroulia

November 2005 **Proceedings of the 20th IEEE/ACM international Conference on Automated software engineering ASE '05**

Publisher: ACM Press

Additional Information:

Full text available:  [pdf\(287.60 KB\)](#)

[full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

This paper presents UMLDiff, an algorithm for automatically detecting structural changes between the designs of subsequent versions of object-oriented software. It takes as input two class models of a Java software system, reverse engineered from two corresponding code versions. It produces as output a change tree, i.e., a tree of structural changes, that reports the differences between the two design versions in terms of (a) additions, removals, moves, renamings of packages, classes, interfaces ...

Keywords: design differencing, design mentoring, design understanding, structural evolution

Results 1 - 20 of 200

Result page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [next](#)

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2007 ACM, Inc.

[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)